

## CLAIMS

1        1. A method for reducing subjective artifacts in a video image, comprising the steps  
2 of:

3        receiving supplemental information that includes at least one parameter that specifies an  
4 attribute of comfort noise for addition to an image;

5        generating the temporally correlated noise in accordance; and

6        adding temporally correlated noise to the image to hide artifacts.

7        2. The method according to claim 1 further comprising the step of generating the  
1 temporally correlated noise by the steps of:

3        obtaining a block pixel average;

4        accessing a look-up table using the block pixel average and picture quantization

5 parameters to obtain weights of temporal correlation factors for weighting the added noise.

1        3. The method according to claim 2 wherein the step of accessing a look-up table  
2 further comprises the step of accessing a look-up table containing Gaussian random numbers.

1        4. The method according to claim 2 wherein the step of adding temporally correlated  
2 noise includes the step of adding temporally correlated noise to one of luma or chroma pixels.

1        5. The method according to claim 4 further comprising the step of adding temporally  
2 correlated noise includes adding noise to both luma and chroma pixels.

6.        Apparatus for reducing subjective artifacts in a video image, comprising:

means for receiving supplemental information that includes at least one parameter that  
specifies an attribute of comfort noise for addition to an image;

means for generating the temporally correlated noise in accordance; and

means for adding temporally correlated noise to the image to hide artifacts.

1        7. The apparatus according to claim 6 further comprising:

2        means for obtaining a block pixel average;

3           means for accessing a look-up table using the block pixel average and picture  
4           quantization parameters to obtain weights of temporal correlation factors for weighting the added  
5           noise.

1           8.       The apparatus according to claim 6 wherein the look up contains Gaussian random  
2           numbers.

1           9.       The apparatus according to claim 6 wherein the means for adding temporally  
2           correlated noise adds temporally correlated noise to one of luma or chroma pixels.

1           10.      The apparatus according to claim 9 wherein the means for adding temporally  
2           correlated noise adds temporally correlated noise to both luma and chroma pixels.